ABSTRACT

The present invention provides strategies for detecting intrusions in wireless environments, and the strategies are based on innovative applications of information analysis as well as other information correlating techniques. The key to detecting intrusions in a RF based environment is to understand the normal spectrum of behavior so that deviations can be detected and analyzed. For a wireless communications grid, this process requires empirical knowledge about how the radios work together as components of the information grid, and how this grid network is managed. Once normal behavior has been characterized, anomalous behavior can be identified. Potential intrusions into the wireless network can be analyzed and an attack model can be created. The attack model can be utilized as the basis for initiating appropriate adaptive responses.